

What Is Claimed Is:

1. A method for operating an internal combustion engine (10), in which the ambient pressure (pu) is determined by an ambient pressure sensor (15) and the pressure (psh) in an intake manifold (11) of the internal combustion engine (10) is determined by an intake manifold pressure sensor (14), and in which the reliability performance of the ambient pressure sensor (15) is checked by comparing (block 38) the ambient pressure (pu) to a starting value (psh_sta) that is obtained by the intake manifold pressure sensor (14) before a starting process of the internal combustion engine (10), wherein the comparison is only performed if a preceding check of the intake manifold pressure sensor (14) yields the result that it is operational (B_sidss, B_drsidss).

2. The method as recited in Claim 1, wherein the result of the check of the intake manifold pressure sensor (14) only continues to be used, if one or more of the following release conditions are fulfilled (B_psidss):
i) the ignition of the internal combustion engine (10) has just been turned on, ii) a starting process of the internal combustion engine (10) has been triggered, iii) the actual speed (nist) of the internal combustion engine (10) is within a desired speed range, iv) a throttle valve (13) of the internal combustion engine (10) is opened no wider than a maximum throttle valve angle (WDKBAST), v) the starting process has not yet exceeded a prescribed duration (SY_TSIDSS).

3. The method as recited in one of Claims 1 or 2, wherein to check the intake manifold pressure sensor (14), a starting value (psh_sta) is detected by the intake manifold pressure sensor (14) before the starting process of the internal combustion engine (10) and is stored; after the starting process, this starting value (psh_sta) is compared to the pressure (psh) in the intake manifold (11); and the intake

manifold pressure sensor (14) is recognized as operational, if the difference of the starting value (psh_sta) and the pressure (psh) exceeds a minimum value (DPDDF).

4. The method as recited in one of Claims 1 through 3, wherein the comparison (block 38) is only performed if one or more of the following release conditions are fulfilled (B_ppldsu): i) the ignition of the internal combustion engine (10) has just been switched on, ii) a starting process has been triggered, iii) a check of the intake manifold pressure sensor (14) has been performed, iv) the intake manifold pressure sensor (14) is operational.

5. The method as recited in one of Claims 1 through 4, wherein to check the ambient pressure sensor (15), a starting process of the internal combustion engine (10) is detected or triggered; before or during the starting process, the intake manifold pressure (psh) detected by the intake manifold pressure sensor (14) is stored as a starting value (psh_sta); the stored starting value (psh_sta) is compared (block 38) to the ambient pressure (pu) obtained from the ambient pressure sensor (15); and the ambient pressure sensor (15) is recognized as operational, if the difference of the starting value (psh_sta) and the ambient pressure (pu) does not exceed a maximum value (DPMAX).

6. The method as recited in one of Claims 1 through 5, wherein when a malfunction of the ambient pressure sensor (15) is detected, the stored starting value (psh_sta) is used as the ambient pressure.

7. The method as recited in one of Claims 1 through 6, wherein in addition to and/or alternatively to the starting value (psh_sta) obtained from the intake manifold pressure sensor (14) and stored, a starting value (pll_sta) obtained from a charge-air pressure sensor and stored before the starting process is used.

8. A method for operating an internal combustion engine (10), in which a pressure sensor is provided which is in contact with the environment before the starting process of the internal combustion engine (10), where a corresponding pressure is determined by the pressure sensor, where the pressure (psh) in an intake manifold (11) of the internal combustion engine (10) is determined by an intake manifold pressure sensor (14), and where the reliability performance of the pressure sensor is checked by comparing (block 38) the pressure determined by the pressure sensor to a starting value (psh_sta) that is obtained by the intake manifold pressure sensor (14) before the starting process of the internal combustion engine (10), wherein the comparison is only performed if a preceding check of the intake manifold pressure sensor (14) yields the result that it is operational (B_sidss, B_drssidss).

9. The method as recited in Claim 1, wherein an ambient pressure sensor (15) or a charge air pressure sensor or an air filter pressure sensor or the like is provided as a pressure sensor.

10. A computer program having program commands that are suitable for carrying out the method as recited in one of the preceding claims, when they are executed on a computer.

11. The computer program as recited in Claim 10, which is stored on an electronic storage medium, in particular a flash memory.

12. A control unit (16) for an internal combustion engine (10), in which the ambient pressure (pu) is determinable by an ambient pressure sensor (15) and the pressure (psh) in an intake manifold (11) of the internal combustion engine (10) is determinable by an intake manifold pressure sensor (14), and in which the reliability performance of the ambient pressure sensor (15) is checked by the control unit (16) by comparing

(block 38) the ambient pressure (pu) to a starting value (psh_sta) that is obtained by the intake manifold pressure sensor (14) before a starting process of the internal combustion engine (10), wherein the comparison is only performed if a preceding check of the intake manifold pressure sensor (14) yields the result that it is operational (B_sidss, B_drsidss).

13. An internal combustion engine (10), in particular for a motor vehicle, where the ambient pressure (pu) is determinable by an ambient pressure sensor (15) and the pressure in an intake manifold (11) of the internal combustion engine (10) is determinable by an intake manifold pressure sensor (14), and where the reliability performance of the ambient pressure sensor (15) is checked by a control unit (16) by comparing (block 38) the ambient pressure (pu) to a starting value (psh_sta) that is obtained by the intake manifold pressure sensor (14) before a starting process of the internal combustion engine (10), wherein the comparison is only performed if a preceding check of the intake manifold pressure sensor (14) yields the result that it is operational (B_sidss, B_drsidss).